

Commentary

# The Effects of Oils on Cholesterol Levels and Cancer Risk

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## DESCRIPTION

Oils are commonly used in cooking and food preparation due to their flavor-enhancing properties and versatility. While oils are a source of essential fatty acids and fat-soluble vitamins, their consumption has been associated with both positive and negative health effects. This paper explores the effects of oils on cholesterol levels and cancer risk, highlighting the importance of choosing healthy fats and moderation in oil consumption for optimal health. Some oils, such as coconut oil, palm oil, and hydrogenated oils (trans fats), are high in saturated and trans fats, which have been shown to raise levels of LDL cholesterol, often referred to as "bad" cholesterol. High LDL cholesterol levels are a risk factor for cardiovascular disease, including heart attacks and strokes. On the other hand, oils rich in monounsaturated and polyunsaturated fats, such as olive oil, canola oil, and sunflower oil, have been shown to have a more favorable effect on cholesterol levels. These oils can help lower LDL cholesterol levels and increase HDL cholesterol levels, often referred to as "good" cholesterol, which has protective effects on cardiovascular health. Oils derived from fatty fish, such as salmon, mackerel, and sardines, are rich in omega-3 fatty acids, which have been shown to reduce triglyceride levels and decrease the risk of heart disease. Incorporating omega-3-rich oils into the diet may help improve lipid profiles and promote heart health. Some oils, particularly those high in omega-6 fatty acids, such as corn oil and soybean oil, may promote inflammation in the body when consumed in excess. Chronic inflammation is associated with an increased risk of certain types of cancer, including colorectal cancer, breast cancer, and prostate cancer. Oils exposed to high temperatures during cooking or processing can undergo oxidation, leading to the formation of harmful compounds called free radicals. Chronic exposure to oxidative stress and free radicals has been implicated in the development of cancer by damaging DNA, promoting cell mutation, and impairing cellular function. Cooking oils at high temperatures can also lead to the formation of HCAs and PAHs, carcinogenic compounds found in charred or burnt foods. Consumption of oils that have been subjected

to high heat cooking methods, such as frying or grilling, may increase the risk of cancer, particularly gastrointestinal cancers. The effects of oils on cholesterol levels and cancer risk depend on their composition, processing methods, and cooking practices. Choosing oils high in monounsaturated and polyunsaturated fats and low in saturated and trans fats, such as olive oil and canola oil, can help support heart health and reduce the risk of cardiovascular disease. Additionally, practicing healthy cooking methods, such as steaming, baking, and sautéing, and avoiding high heat frying or grilling, can help minimize the formation of harmful compounds and reduce the risk of cancer. By making informed choices about oil consumption and cooking practices, individuals can optimize their health and reduce their risk of chronic diseases. This paper explores the effects of oils on cholesterol levels and cancer risk, highlighting the importance of choosing healthy fats and moderation in oil consumption for optimal health. Some oils, such as coconut oil, palm oil, and hydrogenated oils (trans fats), are high in saturated and trans fats, which have been shown to raise levels of LDL cholesterol, often referred to as "bad" cholesterol. High LDL cholesterol levels are a risk factor for cardiovascular disease, including heart attacks and strokes. On the other hand, oils rich in monounsaturated and polyunsaturated fats, such as olive oil, canola oil, and sunflower oil, have been shown to have a more favorable effect on cholesterol levels. These oils can help lower LDL cholesterol levels and increase HDL cholesterol levels, often referred to as "good" cholesterol, which has protective effects on cardiovascular health. Oils derived from fatty fish, such as salmon, mackerel, and sardines, are rich in omega-3 fatty acids, which have been shown to reduce triglyceride levels and decrease the risk of heart disease.

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## **CONFLICT OF INTEREST**

None.

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